

# B R E V I O R A

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### A NEW ZODARIID SPIDER FROM PANAMA

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Until the discovery of the species described in this paper only one zodariid spider was known from Panama, although a few others had been reported from Guatemala and Mexico. The single species hitherto known from Panama is *Storena barroana* (Chamberlin), 1925.

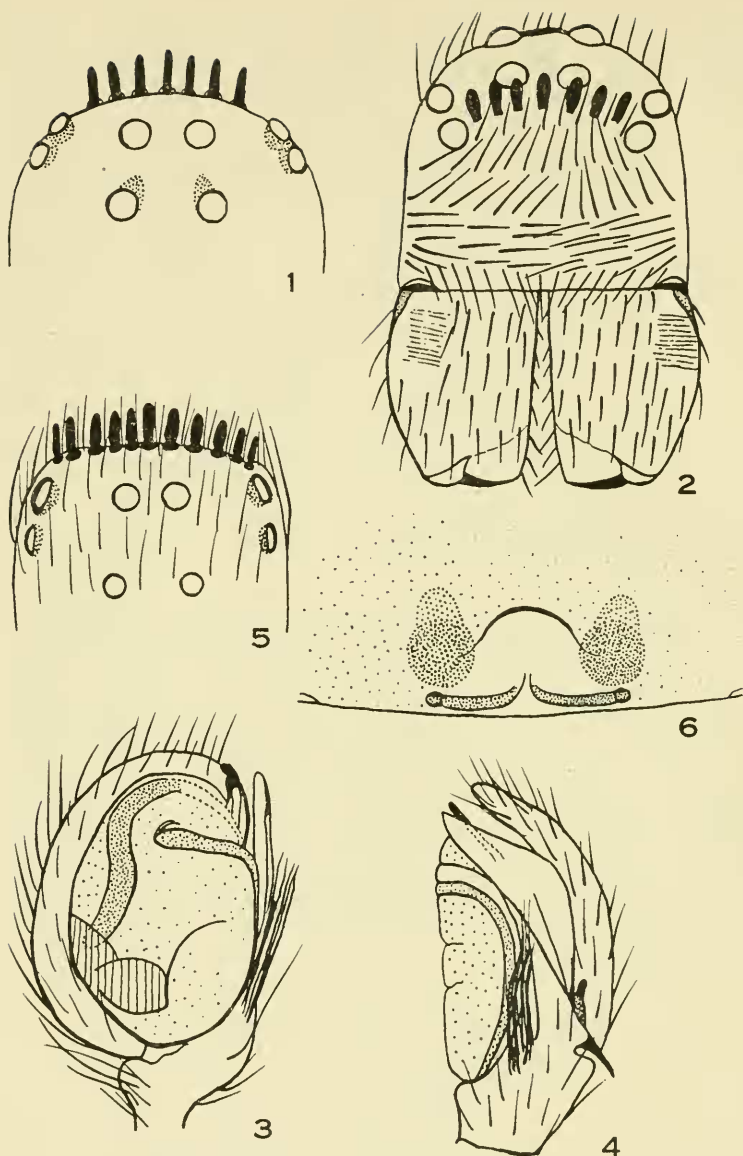
During the summer of 1954, while sifting decaying hay along the roadside near Corozal, Canal Zone, I discovered one immature and two mature males together with one mature and three immature females all belonging to what I regard as a new species referred to the genus *Leprolochus* Simon, 1892. So far as I know, only two species in this genus have been previously reported. The genotype of this rather remarkable genus, *Leprolochus spinifrons* Simon, was from Brazil and *L. parahybae* Mello-Leitao, 1917 was from Venezuela. The latter is known only from females. The description of this new species of *Leprolochus* is given in this brief paper in accord with my usual descriptive formula, and the types have been deposited in the Museum of Comparative Zoology.

Genus *LEPROLOCHUS* Simon, 1892

*LEPROLOCHUS DECORATUS* sp. nov.

(Figures 1-6)

*Male holotype.* Total length 2.21 mm., including spines projecting from head region. Carapace 1.235 mm. long, .770 mm. wide opposite second coxae where it is widest; bluntly rounded in front and with seven robust and bluntly pointed black spines



External Anatomy of *Leprolochus decoratus*

Fig. 1. Anterior cephalic region of male from above.

Fig. 2. Chelicerae, eyes, and special spines of male from in front.

Figs. 3-4. Tarsus and tibia of male palp; ventral and retrolateral views, respectively.

Fig. 5. Anterior cephalic region of female from above.

Fig. 6. Ventral view of epigynum.

projecting forward somewhat below AME (Figs. 1-2); the paratype male has nine of these spines; with a short and shallow median longitudinal thoracic groove opposite the third coxae; finely granulated, especially over pars thoracica; gently arched from PME to posterior border with highest part shortly behind these eyes.

*Eyes.* Eight in two rows; posterior row only slightly longer than anterior row; anterior medians dark, all others light. Viewed from above, posterior row strongly procurved, anterior row moderately so. Viewed from in front, both rows strongly procurved. Ratio of eyes AME : ALE : PME : PLE = 5.5 : 5.25 : 5 : 5. AME separated from one another by about  $4/5$  of their diameter, from ALE by about  $8/5$  of their diameter. PME separated from one another by about  $9/5$  of their diameter, from PLE by nearly twice their diameter. Laterals separated from one another by about  $7/10$  of the diameter of PLE. Central ocular quadrangle wider behind than in front in ratio of about 9 : 7, only slightly longer than wide behind. Height of clypeus equal to somewhat more than six times the diameter of AME.

*Chelicerae.* Stout, vertical, parallel; basal segment .352 mm. long; with moderately distinct basal boss and fine striations anterior to boss; the fang is weak, short, and apparently evenly curved; fang groove obscure and with no teeth observed; the pro-margin has a fleshy ridge with a row of stiff bristles.

*Maxillae.* Distinctly convergent; tapered distally and nearly meeting beyond lip.

*Lip.* Nearly triangular; wider at base than long in ratio of about 3 : 2; reaches about  $2/5$  of the length of the maxillae. Sternal suture straight.

*Sternum.* Cordiform; widest between first and second coxae where it is wider than long in ratio of 25 : 23; anterior border nearly twice as wide as base of lip; very convex; sharply pointed at posterior end but not extended between fourth coxae which are separated by  $4/5$  of their greatest width. All coxae moderately elongated.

*Legs.* 4312. Width of first patella at "knee" .108 mm., tibial index of first leg 15. Width of fourth patella at "knee" .130 mm., tibial index of fourth leg 15.

	Femora	Patellae	Tibiae	Metatarsi	Tarsi	Totals
	(All measurements in millimeters)					
1.	.660	.264	.462	.660	.528	2.574
2.	.638	.250	.440	.660	.506	2.494
3.	.638	.275	.450	.748	.484	2.595
4.	.811	.275	.660	.990	.690	3.426
Palp	.330	.110	*.443	—	.374	1.257

\*Including much extended apophysis.

*Spines.* All legs with inconspicuous spines difficult in some instances to distinguish from coarse bristles. First leg: femur dorsal 1-1-1-2, prolateral 1 distal, retrolateral and ventral 1 weak proximal; patella with numerous coarse bristles but probably only prolateral 0-1-1-0 spines; tibia dorsal 1-1-1 (all weak), prolateral 0-1-0-1, retrolateral 0, ventral only 2 distal; metatarsus 0. Second leg: essentially as in first except metatarsus which has a tuft of ventral bristles at distal end together with four spines on ventral and lateral sides. Third leg: femur apparently only dorsal 1-0-1-2, patella dorsal 1-1, prolateral 0 1-1-0, retrolateral 0-1-0, tibia dorsal 1-1-1, prolateral apparently 0-1-0-0 and with a group of distal bristles forming a comb-like structure, retrolateral 1 distal, ventral only distal 2; metatarsus only with distal spines essentially as in second. Fourth leg: essentially as in third.

*Trichobothria.* Observed as follows: tarsi with a row of two or three with the most distal very long; metatarsi the same; tibiae apparently with two rows of two each in dorsolateral positions; palpal tibia with two dorsal in a row with distal one very long.

*Claws.* Two claws throughout, each pectinate in a single row; with no claw tufts.

*Palp.* Patella very short; tibia with a short body but with a lateral apophysis which extends nearly the full length of the tarsus; also with a pair of retrolateral spines as shown in Figures 3 and 4.

*Abdomen.* Regularly ovoid; longer than wide in ratio of 17 : 13; overlaps cephalothorax only slightly; widest slightly behind

the middle; provided with a moderately well developed scutum; well supplied with short appressed and recurved stiff bristles both black and transparent; postabdomen and anal tubercle project posterior to scutum; venter well chitinized; with a short, recurved lip just anterior to genital groove; tracheal spiracle obscure but apparently just anterior to base of spinnerets and appears to be marked by a row of relatively long stiff bristles; position of probable vestigial colulus obscure. With six pairs of spinnerets partly obscured by a group of bristles.

*Color in alcohol.* Carapace: cephalic parts a light brown; remainder a medium brown with darker streaks. Chelicerae light brown with other mouth parts and sternum yellowish brown. Legs: all coxae nearly white; femora brown, lighter beneath; other segments light brown. Abdomen: dorsally light brown with three irregularly dark reddish brown cross bars in the posterior two thirds and an irregular central stripe reaching to base from first cross bar; the posterior end of the abdomen behind the scutum and the postabdomen are white; the venter is yellow with varying shades.

*Female allotype.* Total length 3.90 mm. Carapace 1.625 mm. long; 1.105 mm. wide opposite interval between second and third coxae where it is widest; gently arched from PME to median, short, longitudinal thoracic groove from which it descends rather gradually to posterior border; cephalic portion well separated from thoracic part; with eleven robust black spines in the position of the seven similar spines in the male (Fig. 5).

*Eyes.* Ratio of eyes  $AME : ALE : PME : PLE = 6.5 : 5.3 : 6 : 6$ . AME separated from one another by about their diameter, from ALE by twice their diameter. PME separated from one another by  $13/6$  of their diameter, from PLE by  $17/6$  of their diameter. Laterals separated from one another by nearly the diameter of ALE. Central ocular quadrangle wider behind than in front in ratio of  $4 : 3$ , longer than wide behind in ratio of  $7 : 6$ . Height of clypeus equal to about eight times the diameter of AME.

*Chelicerae, Maxillae, Lip, and Sternum.* Essentially as in male.

*Legs.* 4321. Width of first patella at "knee" .16245 mm., tibial index of first leg 15. Width of fourth patella at "knee" .2166 mm., tibial index of fourth leg 15.

	Femora	Patellae	Tibiae	Metatarsi	Tarsi	Totals
	(All measurements in millimeters)					
1.	.975	.390	.682	.715	.650	3.412
2.	.975	.390	.650	.975	.650	3.640
3.	1.040	.455	.780	1.235	.780	4.290
4.	1.170	.455	1.000	1.625	1.040	5.290

*Spines.* First leg: femur dorsal 1-0-1-2, probably prolateral and retrolateral only distal 1 or 2, ventral 1r (weak) near middle; patella only prolateral 0-1-1-0; tibia dorsal 1-1-1, prolateral 1-1-1, retrolateral 0-1-0-1, ventral 0-1r-0-2; metatarsus apparently with only two distal but with many spiniform bristles. Second leg: femur probably as in first; patella dorsal 1-1, prolateral 0-1-1-0, retrolateral 0-1-0; tibia probably as in first; metatarsus as in first except with a distal ventral brush of bristles and probably a group of 3 or 4 weak spines. Third leg: femur, patella, and tibia essentially as in second; metatarsus prolateral 0-1-0, retrolateral 0-1-0-1, ventral with brush of bristles as in second and with five clear distal spines on ventral and both lateral surfaces. Fourth leg: essentially as in third except brush is absent but the spines are retained. Palp: with numerous spines on femur, patella, tibia, and tarsus; tarsal claw finely pectinate with about ten slender teeth; claw is opposed to a chitinous tubercle. Trichobothria essentially as in male so far as observed.

*Abdomen.* Well rounded, oviform; 2.405 mm. long, 1.95 mm. wide near middle; without scutum such as that possessed by male; with six spinnerets, the anterior pair quite robust and somewhat the longest; without definite colulus; tracheal spiracle close to base of the anterior spinnerets.

*Epigynum.* Simple but well developed. There is a central shallow depression bordered anteriorly by a strongly chitinized recurved border. Two internal tubules occur at the posterior boundary and on each side there is a relatively large spermatheca (Fig. 6).

*Color in alcohol.* Carapace essentially as in male except that at the base of pars cephalica there is a dorsal, somewhat oval brown spot on each side from which a thin irregular line extends forward to PLE. The dorsal abdominal region is also very similar to that of male except that the reddish brown markings are

broader and more united. Otherwise essentially as in male.

*Type locality.* The male holotype, female allotype, one mature male paratype together with four immature specimens from Corozal, C. Z., July 10, 1954.

#### BIBLIOGRAPHY

BANKS, NATHAN

1929. Spiders from Panama. Bull. Mus. Comp. Zool. at Harvard College, **69**:53-96, 4 pls.

CAMBRIDGE, O. P. and F. P. CAMBRIDGE

- 1889- Arachnida-Araneida. *In*: Biologia Central-Americana. Dulau  
1905. & Co., London.

CHAMBERLIN, R. V.

1925. Diagnoses of New American Arachnida. Bull. Mus. Comp. Zool. at Harvard College, **67**:211-248.

CHICKERING, ARTHUR M.

1947. The Male Allotype and Female Hypotype of *Storena Barroana* (Chamberlin). Papers Michigan Acad. Sci., Arts, Letters, **31** 133-140.

ROEWER, C. FR.

1942. Katalog der Araneae. Vol. 1. Bremen.

SIMON, EUGENE

- 1892- Histoire Naturelle des Araignées. Deuxième Edition. 2 Vols.  
1903. Librairie Encyclopedique de Roret, Paris.